FIRM NO. 2	CLASSIFICATION UNCLASSIFIED	PROCESSING DATE 20 JUN 1961	WJR
CODE 491 / COUNTRY USSR	PS 11 / AF CHART	ACTIVITY CODES ~~438~~ 404, 402	
LOCATION Irkutsk	S/T / NAME OF INSTALLATION		PL. NO.
DATE/INFO DA MO YR: 1960	DATE/SOURCE DA MO YR: 20 Apr 61	SG1A	PF
	CONTROL NO.	SOURCE [redacted]	EVAL

SUBJECT: SOVIET SPACE INSTRUMENTATION.

A Sibirian Scientific Research Institute of Terrestrial Magnetism, Ionosphere and Radiowave Propagation is being organized in Irkutsk as part of the Sibirian branch of the USSR Academy of Sciences on the basis of the existing facilities of the Irkutsk Magnetic-Ionospheric Station and the Irkutsk Regional Bureau of radio forecast. The institute will have five laboratories (terrestrial magnetism and electricity, ionospheric research, propagation of radiowaves, solar research, and study of cosmic rays). It will also have a design office, work shops, library and a group of stations. It will work on the requirements of industrial and scientific organizations (Ref. Ibid)

2216 422

SEP 1962

37285

S/169/62/000/004/070/103
D218/D302

3.2410 (2205, 2705, 2805)

AUTHORS: Sergeyev, A.V., and Luzov, A.A.

TITLE: The barometric coefficient of the neutron component

PERIODICAL: Referativnyy zhurnal. Geofizika, no. 4, 1962, 13, abstract 4G69 (V. sb. Kosmicheskiye luchi, no. 3, M., AN SSSR, 1961, 163-165)

TEXT: Calculations are reported on the barometric coefficients of the neutron component of cosmic rays, based on experimental data obtained at Irkutsk and Deep River. The average value of the barometric coefficient for 1958 - 1959 is $\beta = -(0.69 \pm 0.01)$ %/mb. A seasonal variation was established for the barometric coefficient with a maximum in the summer (0.73 %/mb) and a minimum in the winter (0.65 %/mb). [Abstractor's note: Complete translation].

SG1A

[redacted]

FORM 12-60 326a USE PREVIOUS EDITIONS.

30 SEP 1961 WJR

89799

S/169/61/000/003/017/022
A005/A005

9.9110 (2603, 1041, 1046)

Translation from: Referativnyy zhurnal, Geofizika, 1961, No. 3, p. 32, # 3G282

AUTHORS: Mishin, V. M., Shchepkin, L. A.

TITLE: Perturbations in the F2-Layer According to Observations at Irkutsk

PERIODICAL: "Tr. Sibirsk. fiz.-tekhn. in-ta pri Tomskom un-te", 1959, No. 37, pp. 57-67

TEXT: The statistical regularities of the "activity" of the F2-layer are investigated, i. e., of the irregular fluctuations of the parameters f_0F2 and h'F2. Materials from observations at Irkutsk from the period 1948-1952 are used. As a measure of "activity", the deflections Δf and Δh from the median values of the corresponding magnitudes are taken which were obtained by stable days (in the sense of the undisturbed ionosphere state). The correlation between the intensity of the horizontal component of the Earth's magnetic field and Δf is close to zero. Hence it follows that the influence of magnetic effects on the perturbation of the F2-layer is small. The fluctuations $|\Delta f|$ in all seasons have a maximum about in midday. The diurnal course of the magnitude $|\Delta f|/f_0F2$ differs from the course

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A005/A005

Perturbations in the F2-Layer According to Observations at Irkutsk

of $|\Delta t|$ in such a manner that it has a maximum in winter by night. The diurnal course of $|\Delta h|$ has a maximum in summer by day, in winter by night. The quantity $|\Delta h|$ has a maximum in summer. The diurnal course of $|\Delta f|$ does not change in shape at the transition from stable to magnitically disturbed days. The statistical regularities are individually considered for positive and negative Δf and Δh. The diurnal course of the positive Δf has by magnetically disturbed days a complicated structure and a relatively small amplitude; the negative Δf has a maximum about in midday and little change at the transition hours with a decrease in f_0F2 and inversely. In magnetically disturbed hours, h'F2 always increases whereat this effect has a maximum by night for $\Delta f < 0$, and by day for $\Delta f > 0$. Some other statistical regularities of the magnitudes Δh and Δf are also studied. A phase shift between the disturbance indices of the magnetic and ionspheric characteristics is discovered. The maximum effect of the magnetic disturbance becomes apparent at Δh through 6-12 hours after the disturbance. From the analysis of the obtained regularities it is concluded that one can consider the negative perturbations f_0F2 as a peculiar magnification of effects which are analogous to those which cause the anomalies of the F2-layer in summer. The

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possible variation in intensity of the ionizing agent δI_0 is estimated. By a summer day is $\delta I_0 > 0$ for $\Delta f < 0$. In winter δI_0 agrees in sign with Δf.

L. Shchepkin

Translator's note: This is the full translation of the original Russian abstract.

WJR
14 APR 1961

USSR	**OFFICIAL USE ONLY**	FBIS 60 H 7370 (435)

The laboratory of time and frequencies of the all-union committee of standards, measures, and measuring instruments is located at No. 26 Pervaya Sovetskaya st. in Irkutsk city. Bachelor of technical sciences Lev Nikolayevich Nadeyev is laboratory director and Andrey Mikhaylovich Moroz is senior scientific worker. The laboratory building has an apparatus room, a calculating room, a frequency laboratory, a 10-meter-deep cellar, and two astronomical pavillions equipped with the latest astronomical instruments to observe movements of stars. At the time of its establishment 15 years ago, the laboratory's task was to receive time signals from Japan and transmit them to Moscow; in 1947 it began to determine time by observing the stars. The laboratory has become the third time transmitting point in the Soviet Union since 1959. The time signal transmitted by the laboratory deviates from absolute accuracy by 0.0002 (two ten-thousandth) of a second. It transmitts time signals to the eastern and northern regions of the country and checks time signals transmitted by Soviet and foreign stations, particularly Moscow, Tashkent, China, Japan, and America. (Irkutsk, Russian, Oct. 30, 1960, 1200 GMT)

FIRM NO.	CLASSIFICATION	CARD NO.
1117206	UNCLASSIFIED PROD	A12787-9

CODE	COUNTRY	CODE-P.S.	LOCATION	INDUSTRIAL CATEGORY CODES
491	USSR	723	MOSKVA"	40

DATE/INFO DA.	MO.	YR.	DATE/SOURCE DA.	MO.	YR.	EVAL.	MN. & NO.	REMARKS
30	6	57	31	7	57			[redacted]

The Institute of Terrestrial Magnetism will be the center from which "be prepared" signals will be sent to all the stations of the Union and to those of the Eurasian countries. These signals will serve to notify stations and observatories of some espcially interesting geophysical phenomena, such as, for instance, the magnetic and ionospheric storms.

A great deal of information is expected from such explorations. There is a possibility of discovering new interconnections among the geophysical phenomena which will permit to find ways of solving long distance radio communication problems and other practical questions.

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FORM NO. 2202

[redacted]

FIRM NO. 221822	CLASSIFICATION UNCLASSIFIED	PROCESSING DATE 21 NOV 1960	WJR
CODE 491	COUNTRY USSR	PS 11	CHART	ACTIVITY CODES 435 402, 404
LOCATION Irkutsk	S/T	NAME OF INSTALLATION	MIN
DATE/INFO DA MO YR	DATE/SOURCE DA MO YR		PF
	3 Oct 60	CONTROL NO.	SOURCE FDD FOREIGN PRESS BULLETION	EVAL

NEW SCIENTIFIC INSTITUTES --Moscow, Vestnik Akademii Nauk SSSR, No 8, 1960, p 117

The Siberian institute will be built on the base of the Irkutsk Magneto-Ionosphere Station and the Irkutsk Zonal Bureau of Radio Transmission Forecasts. The institute will study terrestrial magnetism, ionosphere and radiowave propagation, and solar activity and related phenomena in the territory of Siberia and the Far East. It will provide magneto-ionosphere service for radio transmission forecasts in this territory for scientific purposes and for better servicing of the needs of production and scientific organizations. The structure of the institute, as approved, will consist of five laboratories (terrestrial magnetism and electricity, ionosphere studies, radiowave propagation, solar studies, and cosmic rays), a design bureau, workshops, libraries, and a network of stations.

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II I

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438

32140
S/534/61/000/021/004/005
D055/D114

AUTHOR: Ivanov, K.G.

TITLE: Geomagnetic phenomena observed at the Irkutsk Magnetic Observatory after the explosion of the Tunguska meteorite

SOURCE: Akademiya nauk SSSR. Komitet po meteoritam. Meteoritika, no. 21, 1961, 46-48

TEXT: The author has studied magnetograms of the H, Z and D field components obtained at the Irkutskaya magnitnaya observatoriya (Irkutsk Magnetic Observatory) on June 30, 1908. Notable changes in the H and Z components occurred. The explosion of the meteorite took place at 0 hrs 17.2 mins GMT, and changes in the field began at 0 hrs 19.5 mins. The greatest changes occurred in the H component (fig. 1). Within 20 minutes the field increased by 20 gamma, then remained constant within 1 gamma for 12 minutes and finally diminished by 67 gamma from the highest level over 54 minutes. The K index remained at 5 between 0 and 3 hours GMT. Fig.2 shows changes in the Z component on a scale of 28 gamma. There were no perceptible changes in the D component. In the case of H and Z components, the phenomena lasted about 1½

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D055/D114

Geomagnetic phenomena ...

hours. They resembled a magnetic storm in that they occurred in three stages: in the initial phase the field grows, in the main phase it diminishes and then come the after-effects. But the scale and duration of all three phases was less than in magnetic storms. During the same time at the Sverdlovsk, Pavlovsk and Tbilisi magnetic observatories the field remained quiet. The author regards these results as an indication that the variations in the magnetic field were caused by the explosion of the Tunguska meteorite. It may be assumed that the passage through the ionosphere of a shock-wave caused by the explosion, gave rise to the increase in tension of the geomagnetic field. The time delay in these changes after the moment of explosion was equal to the time taken by the shock-wave to pass from the point of explosion to the lower boundary of the ionosphere. If the speed of the shock-wave is taken as $3.3 \cdot 10^4$ cm/sec and the height of the lower boundary as 80 km, the time delay is $2.4 \cdot 10^2$ sec, which approximates to the figure determined from magnetograms - $1.4 \cdot 10^2$ sec. The author expresses thanks to Professor Yu.D. Kalinin, to V.I. Afanas'yeva and V.M. Mishin, Candidates of Physical and Mathematical Sciences, to G.V. Kuklin, a junior scientific associate of the East Siberian branch of the SOAN SSSR, to L.A. Shapkin,

Geomagnetic phenomena ...

associate of the Kafedra radiofiziki Irkutskogo gosuniversiteta (Chair of Radiophysics of the Irkutsk State University), to A.V. Bukhnikivshvili, Director of the Institut geofiziki (Institute of Geophysics) of the AN Gruzinskaya SSR, to M.A. Belousova, scientific associate of the Institut zemnogo magnetizma Akademii nauk SSSR (Institute of Terrestrial Magnetism of the Academy of Sciences USSR), and to T.N. Panov, scientific associate of the Sverdlovsk Magnetic Observatory. There are 2 figures, 1 set of figures and 8 references, of which 4 are Soviet and 4 non-Soviet. The 4 English-language references are: T. Gold, Gas Dynamics of Cosmic Clouds. Edit. by H.C. van de Hulst, T.M. Burgers, Amsterdam, 1955; S.F. Singer, Trans. Amer. Geophys. Union, 38, 2, 1957; H.E. Petschek, Rev. Mod. Phys., 30, 1958, 966; H. Uyeda, H. Maeda, A. Kimpara, T. Obayashi, S. Ishikava, a. Y. Kawabata, J. Geomagn. and Geoelectr., 11, 42, 1959. [Abstracters note: Essentially verbatim translation].

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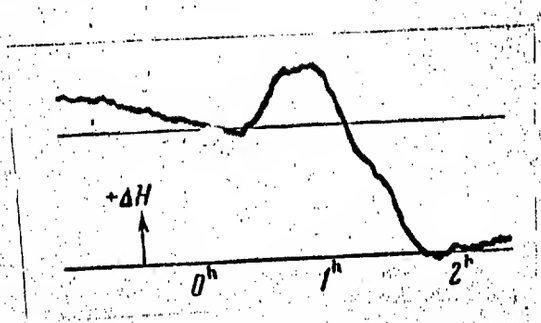
D055/D114

Geomagnetic phenomena ...

Fig. 1 Changes in the H component of the Earth's magnetic field observed at the Irkutsk Magnetic Observatory after the explosion of the Tunguska meteorite (GMT; marking correction for one hour 4.2 min).



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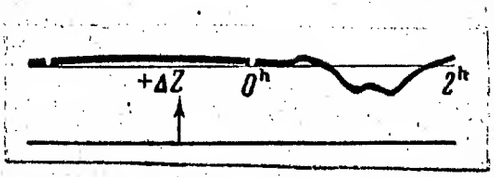
Geomagnetic phenomena ...

Fig. 2 Changes in the Z component of the Earth's magnetic field observed at the Irkutsk Magnetic Observatory after the explosion of the Tunguska meteorite (GMT; no correction).



S/030/60/000/008/010/013
B021/B054

AUTHOR: None given

TITLE: News in Brief

PERIODICAL: Vestnik Akademii nauk SSSR, 1960, No. 8, p. 117

TEXT: 1) On the Organization of the Sibirskiy institut zemnogo magnetizma, ionosfery i rasprostraneniya radiovoln (Siberian Institute of Geomagnetism, Ionosphere, and Propagation of Radio Waves). The Presidium decided to establish this Siberian institute in Irkutsk within the framework of the Sibirskoye otdeleniye (Siberian Department), on the basis of the Irkutskaya magnitno-ionosfernaya stantsiya (Irkutsk Magnetic-ionospherical Station) and the Irkutskoye zonalnoye byuro radioprognozov (Irkutsk Zone Office of Radio Forecasts). The structure of this institute consisting of five laboratories (for geomagnetism and electricity, investigations of the ionosphere, propagation of radio waves, investigations of the sun, cosmic rays), as well as a design office, workshops, a library, and a group of stations, was approved.

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News in Brief S/030/60/000/008/010/013
B021/B054

2) On the Organization of the Polyarnyy geofizicheskiy institut (Geophysical Polar Institute). The Presidium decided to establish the Geophysical Polar Institute within the framework of the Kol'skiy filial im. S. M. Kirova (Kola Branch imeni S. M. Kirov) in order to coordinate the geophysical research work carried out on the Kol'skiy Peninsula by institutes of the Akademiya nauk SSSR (Academy of Sciences USSR). This institute is to be established in Murmansk on the basis of the local department of the Institut zemnogo magnetizma, ionosfery i rasprostraneniya radiovoln (Institute of Geomagnetism, Ionosphere, and Propagation of Radio Waves), of the Lovozerskaya stantsiya Instituta fiziki Zemli (Lovozero Station of the Institute for the Physics of the Earth), and of the seysmicheskaya stantsiya "Apatity" (Seismic Station "Apatity"). S. I. Isayev, Candidate of Physical and Mathematical Sciences, was appointed Deputy Director of the institute. 3) Award of Name Prizes. On a resolution by the expert commissions, the following name prizes were awarded for 1960: the Prize imeni P. P. Anosov of 20.000 rubles to I. A. Oding, Corresponding Member AS USSR, V. S. Ivanova, V. V. Burdukskiy, V. N. Geminov, Candidates of Technical Sciences, for their

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News in Brief S/030/60/000/008/010/013
B021/B054

paper on the theory of creeping and the durability of metals; the Prize imeni N. N. Miklukho-Maklay of 10.000 rubles to M. G. Levin, Doctor of Historical Sciences, for his paper "Etnicheskaya antropologiya i problemy etnogeneza narodov Dal'nego Vostoka" (Ethnic Anthropology and Problems of Ethnogenesis of the Peoples of the [Soviet] Far East). 4) On the Organization of the "Zhurnal vychislitel'noy matematiki i matematicheskoy fiziki". In the place of the publication of nonperiodical collective volumes on calculating mathematics, the above-mentioned periodical is to be published as from 1961 as the organ of the Otdeleniye fiziko-matematicheskikh nauk (Department of Physical and Mathematical Sciences) six times a year comprising 12 printed sheets in an edition of 3,000 copies. One copy will cost 15 rubles. Academician A. A. Dorodnitsyn's appointment as chief editor of the periodical was approved.

Card 3/3

AUTHOR: Vinogradov, P. A. SOV/2o-126-3-28/69 (438)

TITLE: On the Anomaly of the Electrotellurium Field in the Region of the Ushkan'i Isles (Baykal Lake) (Ob anomalii elektrotellurichеskogo polya v rayone Ushkan'ikh ostrovov (oz. Baykal))

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 126, Nr 3, pp 561 - 564 (USSR)

ABSTRACT: In the years 195o - 1956 a group of the Irkutskoy geofizicheskoy observatorii (Irkutsk Geophysical Observatory) at Baykal carried out measurements of the terrestrial field. These measurements were carried out by recording the variation of the earth potential by means of a measuring instrument consisting of two dipoles, which were erected in the meridional and latitudinal directions. The two measurements shown by figure 1, which were carried out simultaneously at Baykal and in Bol'shoy Ushkan'i, showed a simultaneous variation of the electrotellurium field at both points. Figure 2 shows a measurement of a short-period oscillation of the electrotellurium field. The amplitude of the irregular oscillations amounted to an average of 25o - 300 mv/km and, in the case of strong perturbations, it exceeded 5oo mv/km. The maximum gradient of the constant variation of this field is 98 mv/km. The direction of the resulting electrotellurian field is given with a deviation of 1o-15° from the meridian,

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On the Anomaly of the Electrotellurium Field in the Region of the Ushkan'i Isles (Baykal Lake) SOV/2o-126-3-28/69

within the Listvenichnyy rayon as amounting to 45-6o°. When investigating the causes of these phenomena it is shown that little is as yet known about this region, that the water of Baykal Lake has a low electric conductivity, and that the earth current in this region has a strength which is near that above the water. In conolusion, the influence of geological formations is investigated, in which connection papers by G. Yu. Vereshchagin and V. V. Lamakin are mentioned. There are 3 figures, 2 tables, and 5 Soviet references.

ASSOCIATION: Irkutskaya magnitno-ionosfernaya stantsiya Nauchno-issledovatel'skogo instituta zemnogo magnetizma, ionosfery i rasprostraneniya radiovoln (Irkutsk Magneto-ionospherical Station of the Scientific Research Institute for Terrestrial Magnetism, the Ionosphere, and the Propagation of Radio Waves)

PRESENTED: February 4, 1959, by V. V. Shuleykin, Academician

SUBMITTED: January 1o, 1959

Card 2/2

INFORMATION ON SOVIET BLOC INTERNATIONAL GEOPHYSICAL COOPERATION--1959

Measurements on Vertical Component of Earth's Electric Field

The results of observations on the vertical component of the Earth's electric field according to measurements conducted in the fresh-water Lake Baykal are presented. ("Measurement of the Vertical Component of the Earth's Electric Field in Lake Baykal," by P. A. Vinogradov, Irkutsk Magnetic-Ionosphere Station, Moscow, Izvestiya Akademii Nauk SSSR, Seriya Geofizicheskaya, No 1, Jan 59, pp 83-86)

FIRM NO. 221622	CLASSIFICATION	PROCESSING DATE 31 OCT 1961 WJR
CODE 491 COUNTRY USSR	PS 11 AF CHART ACTIVITY CODES 438 (—)	
LOCATION IRKUTSK	S/T NAME OF INSTALLATION	MIN
DATE/INFO DA MO YR	DATE/SOURCE DA MO YR	PF
	CONTROL NO. SOURCE VOLUME 13, # 8 MONTHLY INDEX OF RUSSIAN ACCESSIONS LC	EVAL

NOV 60

PART B--PERIODICALS

An asterisk (*) appearing before a periodical title indicates that it is available in full English translation. For publishers of such translated periodicals, their subscription prices, etc., see listing at end of this issue.

SUBJECT INDEX TO MONOGRAPHS AND PERIODICALS

Akademiia nauk SSSR. Vestnik (Academy of Sciences of the U.S.S.R. Journal)

IRKUTSK—GEOPHYSICAL RESEARCH
Organization of the Siberian Institute of Terrestrial Magnetism, Ionosphere, and Radio Wave Propagation. Vest.AN SSSR 30 no.8:117 Ag '60.

FORM 326 REPLACES FORM 326A. 6-58

FIRM NO. 221622	CLASSIFICATION UNCLASSIFIED	PROCESSING DATE 31 MAY 1961 WJR
CODE 491 COUNTRY USSR	PS 11 AF CHART ACTIVITY CODES 438 (—)	
LOCATION Irkutsk	S/T NAME OF INSTALLATION	MIN
DATE/INFO DA MO YR	DATE/SOURCE DA MO YR	PF
	CONTROL NO. SOURCE No. 122 -- 1960 FBIS DAILY USSR & EE DD 4	EVAL

23 June 60

NEW SCIENCE INSTITUTE--The presidium of the Siberian branch of the USSR Academy of Sciences has decided to open an institute of terrestrial magnetism and ionosphereic and radiowave propagation in Irkutsk. This is the 13th scientific geological establishment in Siberia.. (Moscow, Home, June 22, 1960, 1600 GMT--L) (UNCLASSIFIED)

FORM REPLACES FORM 326A. 6-58

FIRM NO.	CLASSIFICATION	CARD NO.
2216422	UNCLASSIFIED 491/11	WJR 6 JAN 1960

CODE	COUNTRY	CODE-P.S.	LOCATION	INDUSTRIAL CATEGORY CODES
491	USSR	1131	IRKUTSK	438

DATE/INFO DA.	MO.	YR.	DATE/SOURCE DA.	MO.	YR.	EVAL.	MN. & NO.	REMARKS
			1	8	58			Middle Latitude Sta.

CIA NO. AND SOURCE PB 131632-25
SOVIET BLOC INTERNATIONAL GEOPHYSICAL YEAR INFORM.

Ionospheric Perturbations Classified by Soviet Scientist

Ionospheric perturbations according to the data on the middle-latitude stations (Leningrad, Moscow, Sverdlovsk, Irkutsk, and Alma-Ata) are discussed by N.V. Mednikova. According to an abstract of her article "Ionospheric Perturbations in the Middle Latitudes," in Fizika Korpuskulyarnykh Potokov i ikh Vozdeystriye na Verkhnyuyu Atmosfery Zemli (Physics of Solar Corpuscular Flows and their Effect on the Upper Atmosphere of the Earth), Academy of Sciences USSR, 1957, pp 183-244, 245, Mednikova presents a classification of disturbances by different types in relation to the symbol and value of variations of the critical frequency of F2 (f^{o} F2) from the sliding median values (Δ pert. f^{o}F2)

FORM NO. 1 NOV 54 329a (20)

FIRM NO.	CLASSIFICATION	CARD NO.
~~6022758~~ 2216422	Official Use Only	29 DEC 1958

CODE	COUNTRY	CODE-P.S.	LOCATION	INDUSTRIAL CATEGORY CODES
491	USSR	1131	IRKUTSK	438

DATE/INFO DA.	MO.	YR.	DATE/SOURCE DA.	MO.	YR.	EVAL.	MN. & NO.	REMARKS
			22	9	58			

CIA NO. AND SOURCE SUMMARY OF WORLD BROADCASTS, BBC

Printing chronometers have been dispatched to Irkutsk and Barnaul from the Leningrad electric-clock works. These new instruments can measure time with an accuracy of the 5,000th part of a second. Since they register the time simultaneously with calculating it they can be used for astronomical purposes. Already 115 instruments have been made for the USSR Acadamy of Sciences. (Moscow 19.30, 10.9.58)

SG1A

[redacted]

Next 2 Page(s) In Document Exempt

AUTHOR: Solov'yev, S.L.

WJR 22 MAR 1960

TITLE: Meeting of Seismological Section of the Ac.Sc.USSR on the Question of Seismic Division into Districts (Sessiya soveta po seysmologii AN SSSR po voprosam seysmicheskogo rayonirovaniya)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Geofizicheskaya, 1958, Nr 8, pp 1054 - 1056 (USSR)

ABSTRACT: The meeting took place on March 20 - 26, 1958, in Moscow. About 150 members from various districts of the USSR were present. Over 30 papers were read.
S.V. Medvedev (Institut fiziki Zemli AN SSSR - Institute of Terrestrial Physics Ac.Sc.USSR) described the modern trends in seismic divisions in Russia and abroad. He listed the main drawbacks of the present division maps of the USSR prepared in 1957 and suggested ways of improvement.
B.A. Petrushevskiy (Institute of Terrestrial Physics, Ac.Sc.USSR) read the paper about the relation between the earthquakes of maximum intensity and geological conditions. The author was working on seismic properties of both the Asian alpine and the Asian plateau regions, including those of the Paleozoic base. He observed that the regions of plateaux have considerably stronger

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Meeting of Seismological Sections of the Ac.Sc.USSR on the Question of Seismic Division into Districts

earthquakes in comparison with the alpine ones, with a far greater number of earthquakes in the latter. The cause of this phenomenon could be the difference in strength of the materials between these two kinds of regions.
Yu.V. Riznichenko and I.L. Nersesov (as above) described a numerical method of seismic division into districts. Their hypothesis was based on a relation between the number of the earthquakes of various intensities as estimated from literature and found experimentally by the Tajik seismic expedition of the Institute. The authors showed a close correlation of the number of earthquakes and their intensities for various regions. They introduced a method where the seismic characteristics are expressed by means of correlation graphs. The frequency of weak earthquakes could be employed in order to predict the major ones. A mathematical calculation for determination of the various data was given.
N.A. Vvedenskaya (as above) stated in her report that, according to experimentation carried out in Central Asia, the distribution of the weak earthquakes does not

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SOV/49-58-8-17/17

Meeting of Seismological Sections of the Ac.Sc.USSR on the Question of Seismic Division into Districts

correlate with the earlier earthquakes of maximum intensity. It is possible, however, to draw a boundary enclosing the strong, early earthquakes as determined from the observations of the weak ones.
A.Z. Kats (as above) referred to the physical basis of separating small areas (micro-division). The relation of the intensity of oscillation at the surface of sedimentary layers to that of the crystallic base could be explained not so much by the physical properties of the rocks but by the resonant properties of the layers. The theoretical calculations of these properties agree very well with the data obtained from both the weak earthquakes and the general observations of the provisional seismic stations. For the better seismic differentiations, the author suggests considering the seismic deformations rather than the amplitude of oscillations.
A calculation of the dislocation at the surface of a layer as related to its resonant properties, with consideration of damping of the seismic energy in the interior of the layer was given by [illegible]enko (as above).

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SOV/49-58-8-17/17

Meeting of Seismological Sections of the Ac.Sc.USSR on the Question of Seismic Division into Districts

V.V. Popov (Voyenno-inzhenernaya akademiya - Military Engineering Academy) gave a summary of the geological and engineering investigations which should precede construction of a map for a small area. As an example, he showed the procedure in micro-dividing a mountain. A.N. Safaryan (Institut stroitel'nogo dela AN Gruzinskoy SSR - Institute of Construction Ac.Sc. Georgian SSR) described a method of micro-dividing carried out on the areas where large hydro-technical constructions in the Caucasus and Central Asia were erected. He stressed the need of preserving the documentation of the old, major earthquakes.
I.V. Sukhov (Moldavskiy filial AN SSSR - Moldavian Branch of the Ac.Sc.USSR) gave a short description of the geological

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SOV/49-58-8-17/17

Meeting of Seismological Sections of the Ac.Sc.USSR on the Question of Seismic Division into Districts

structure of the eastern slopes of the Eastern Carpathian Mountains and indicated the possibility of the isoseismics of the Carpathian earthquakes running across the structural line of the South Bessarabian Range., which was established recently in the course of drilling oilwells. On the evidence of this and other observations made by the author during the earth quake in 1940, adjustments were made in the seismic divisions of Moldavia with the transfer of part of the Kishinev area into the eight-mark region.
Ye.I. Byus and A.D. Tskhakay (Institute of Geophysics of the Ac.Sc. Georgian SSR) showed how the Caucasus region is divided seismologically as a result of the extensive seismic observations carried out on its Russian side.

V.A. Rastvorova and D.N. Rustanovich (Institute of Terrestrial Physics Ac.Sc.USSR) gave an account of the

Card5/10

SOV/49-58-8-17/17

Meeting of Seismological Sections of the Ac.Sc.USSR on the Question of Seismic Division into Districts

Institute's expedition to Krasnaya Polyana region where seismic and tectonic structure of the southern slopes of the West Caucasus Mountains (between Sochi and Sukhumi) were investigated.
I.V. Kirillova and A.A. Sorskiy (Institute of Terrestrial Physics, Ac.Sc.USSR) presented a map of seismic divisions of Caucasus in 1:1 000 000 scale and described the method of its compilation - also a map in 1:200 000 scale of West Turkmenia was described by I.A. Rezanov, V.A. Rastvorova and N.N. Leonov (as above).
S.V. Puchkov (as above) told about the geological differentiation of the Ashkhabad earthquake area, based on the seismic observations of the provisional stations.
N.P. Kostenko (Geologicheskiy fakul'tet Moskovskogo Universiteta - Geological Faculty of Moscow University) described the character of the newest movements of the higher regions of Central Asia and [illegible] and explained how the longitudinal and transversal river valleys were employed in an attempt to find the direction and

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intensity of these movements.
V.I. Bune (Institut seysmologii AN Tadzhikskoy SSR - Institute of Seismology of the Ac.Sc.Tajik SSR) and S.A. Zakharov (Institut geologii AN Tadzhikskoy SSR - Institute of Geology of the Ac.Sc. Tajik SSR) gave an account of the seismic observations in connection with the work on the hydro-technical construction on the River Vakhsh. They also reviewed some of the seismic data obtained from the instrumental measurements of the Stalinabad area.
A.T. Kon'kov (Seysmicheskaya stantsiya "Andizhan" - Seismic Station "Andizhan") gave a seismic history of the Fergana Valley with an emphasis on the periodic character of the major earthquakes in that region and the apparent migration down the Fergana break of their focus.
Yu.V. Fesenko (Seismic Station "Naryn") presented some details of several strong earthquakes in Central Kirgizia.
V.K. Iodko (Seismic Station "Namangan") described a

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method of collecting the macro-seismic data of earthquakes and stressed the importance of the extensive collection of the non-destructive earthquake data.
N.A. Florensov, A.A. Treskov and V.P. Solonenko (Vostochno-Sibirskiy filial AN SSSR - East-Siberian Branch of the Ac.Sc.USSR) gave a short account of their project of the seismic divisions of East Siberia. The greatest part of Zabaykal'e region, together with the area of Muya earthquake in 1957 they included into the eighth-marked region.
N.M. Organova (Dal'nevostochnyy filial AN SSSR - Far East Branch of the Ac.Sc.USSR) outlined a project of seismic divisions of the peninsula Trudnyy.
G.D. Panasenko (Kol'skiy filial AN SSSR - Kola Branch of the Ac.Sc.USSR) referred to the tectonic interpretation of the seismic phenomena of the Kola Peninsula
M.D. Ferchev (Sakhalinskiy kompleksnyy nauchno-issledovatel'skiy institut AN SSSR - Sakhalin Research Institute of the Ac.Sc.USSR) described the project of seismic and tectonic divisions of Sakhalin.

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G.P. Gorshkov (Geological Department of Moscow University) spoke of the desirability of the work on seismic divisions on the territories adjacent to the USSR.
I.V. Kirillova presented a composite chart of the seismic conditions of Caucasus, Turkey and Western Urals.
G.N. Korostin (Institut fiziki i geofiziki AN Turkmenskoy SSR - Institute of Physics and Geophysics of the Turkmenian SSR) described an accellograph, a device for recording the acceleration of strong earthquakes.
M.P. Barshteyn (Tsentral'nyy nauchno-issledovatel'skiy institut stroitel'nykh konstruktsiy Akademii stroitel'stva i arkhitektury SSSR - Central Research Institute of Construction and Architecture Academy USSR) told of an application of the probability method in dynamic computation of the seismic effect on constructions.
A.G. Nazarov (Ac.Sc. Armenian SSR) spoke on an application of the comparison method for the experimentation on the seismic condition of constructions.
Two papers were received by post:
M.M. Rubinshteyn (Geological Institute Ac.Sc.Georgian SSR) on "Geological Data for the Seismic Divisions of Gebrgia"

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Ye.P. Denisov and A.M. Smirnov (Far East Branch of the Ac.Sc.USSR) on "The Latest Slow Movements of the South Coast and the Adjacent Areas".
About 20 members took part in the discussions, the main subject of which was the necessity of continuation of work on the seismic divisions. Some minor scientific reports were also announced.
The detailed account of the meeting will be published in the Bulletin of Seismology.
A talk on the results of a preliminary inspection of the epicentral region of the Gobi-Altay (Mongolia) earthquake on December 4, 1957, was given by A.A. Treskov, N.A. Florensov and V.P. Solonenko . The discussion on some administrative matters concluded the meeting.

1. Earthquakes--USSR 2. Seismological station--USSR

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REMARKS: IGY Observatory

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HEADING:

Main Geophysical Observatory at the Beginning of the IGY

N. P. Rusin, chief of the Methods Division of the Main Geophysical Observatory imeni Voyeykov, discusses the activity at the observatory at the time of the opening of the IGY as follows.

SOURCE:

(Znaniye-Sila, No 9, Sep 57, p 24)

Before the official opening of the IGY, associates of eight stations conducting observations on atmospheric electricity met in Leningrad. Some of these stations, Murmansk, Leningrad, Kiev, and Odessa, are located along a meridian, and others, Sverdlovsk, Irkutsk, Tashkent, and Yuzhno-Sakhalin, deployed in a latitude direction. In Leningrad, the associates of these stations received new and unique instruments especially made for the IGY and learned how to use them. These instruments permit not only the measurement of the intensity of the electrical field of clouds, but also the recording of the number of electrical charges in a cloud, the determination of the time nnterval between discharges during which the charge is built up again in the cloud and a flash of lightning occurs.